

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) A method for manufacturing an aeronautical member, comprising the steps of:

a.) providing an aluminum alloy plate with a predetermined thickness, said plate having been stretched after quenching and having been brought to a first temper selected from the group consisting of T4, T73, T74 and T76, wherein said aluminum alloy plate is produced from a AA7xxx-series aluminium alloy having a composition consisting of, in weight percent:

Zn 5.0 – 8.5

Cu 1.0 – 2.6

Mg 1.0 – 2.9

Fe < 0.3

Si < 0.3

optionally one or more elements selected from:

Cr 0.03 – 0.25

Zr 0.03 – 0.25

Mn 0.03 – 0.4

V 0.03 – 0.2

Hf 0.03 – 0.5

Ti 0.01 – 0.15,

the total of the optional elements not exceeding 0.6, incidental impurities each < 0.05, total < 0.20;

the balance aluminium,

b.) shaping said alloy plate to obtain a predetermined shaped structure having a pre-machining thickness in the range of 10 to 220 mm, wherein said shaping comprises cold forming, wherein said cold forming comprises bending said alloy plate in said first temper selected from the group consisting of T4, T73, T74 and T76 to form the shaped structure having a built-in radius,

c.) heat-treating said shaped structure, wherein said heat-treating comprises artificially aging said shaped structure to a second temper selected from the group

consisting of T6, T79, T78, T77, T76, T74, T73 or T8 temper condition,

d.) machining said shaped structure to obtain an integrated monolithic aluminum structure as said aeronautical member for an aircraft.

2-5. (Cancelled)

6. (Previously Presented) The method according to claim 1, wherein said aluminum alloy plate has been stretched in a range of up to 8% after quenching prior to the shaping step.

7. (Previously Presented) The method according to claim 1, wherein said aluminum alloy plate has been stretched in a range of 1 to 5% after quenching prior to the shaping step.

8-9. (Cancelled)

10. (Previously Presented) The method according to claim 1, wherein said aluminum alloy plate is produced from an aluminum alloy selected from the group of AA7x50, AA7x55, and AA7x75 series alloys.

11-12. (Cancelled)

13. (Previously Presented) The method according to claim 1, wherein said shaped structure has a pre-machining thickness in the range of 15 to 150 mm.

14. (Previously Presented) The method according to claim 1, wherein said shaped structure has a pre-machining thickness in the range of 30 to 60 mm.

15. (Previously Presented) The method according to claim 1, wherein the integrated monolithic aluminum structure has a distortion in its longitudinal direction of less than 0.13 mm when measured according to BMS 7-323D, section 8.7.

16. (Previously Presented) The method according to claim 1, wherein the integrated monolithic aluminum structure has a distortion in its longitudinal direction of

less than 0.10 mm when measured according to BMS 7-323D, section 8.7.

17. (Cancelled)

18. (Previously Presented) The method according to claim 1, wherein said aluminum alloy plate is produced from an aluminum alloy having a composition consisting of, in weight percent:

Zn 5.0 - 8.5

Cu 1.0 - 2.6

Mg 1.0 - 2.9

Fe < 0.15

Si < 0.15,

optionally one or more elements selected from:

Cr 0.03 – 0.25

Zr 0.03 - 0.25

Mn 0.03 - 0.4

V 0.03 - 0.2

Hf: 0.03 - 0.5

Ti 0.01 – 0.15,

the total of said optional elements not exceeding 0.6,

incidental impurities each <0.05, total <0.20

the balance aluminum.

19. (Previously Presented) An integrated monolithic aluminum structure produced in accordance with the method according to claim 1, wherein said shaped structure is machined to obtain the integrated monolithic aluminum structure with a base sheet and integral components,

wherein the integrated monolithic aluminum structure has a distortion in its longitudinal direction of less than 0.13 mm when measured according to BMS 7-323D, section 8.7 and a lack of regions of differing inner stress levels, wherein said base sheet is a wing skin of an aircraft, said components are at least parts of integral ribs or other integral reinforcements of a wing of an aircraft.

20-22. (Cancelled)

23. (Previously Presented) The monolithic aluminum structure according to claim 19, wherein the integrated monolithic aluminum structure has a distortion in its longitudinal direction of less than 0.10 mm when measured according to BMS 7-323D, section 8.7.

24. (Previously Presented) The monolithic aluminum structure according to claim 23, wherein the integrated monolithic aluminum structure has an exfoliation resistance of EB or better measured according to ASTM G34-97.

25. (Previously Presented) The monolithic aluminum structure according to claim 23, wherein the aluminum alloy plate has a T451 temper and the integrated monolithic aluminum structure has a T7351 temper and the distortion in the longitudinal direction of the monolithic aluminum structure was less than 0.09 mm.

26-28. (Cancelled)

29. (Previously Presented) The method according to claim 1, wherein said heat treatment of said shaped structure comprises an annealing treatment.

30-31. (Cancelled)

32. (Previously Presented) The method according to claim 1, wherein said heat treatment of said shaped structure comprises artificial ageing in the range from about 79 to 175 °C.

33-34. (Cancelled)

35. (Previously Presented) The method according to claim 1, wherein said aeronautical member is a structural part of an aircraft.

36. (Previously Presented) The method according to claim 35, wherein said structural part of an aircraft comprises stringers and skin, wherein the stringers are

integrally connected to the skin.

37. (Previously Presented) The method according to claim 1, wherein said machining of said shaped structure obtains said integrated monolithic aluminum structure for part of a wing skin or a frame portion as said aeronautical member for an aircraft.

38. (Previously Presented) The method according to claim 1, wherein said machining of said shaped structure occurs after said artificial ageing.

39. (New) The method according to claim 1, wherein the first temper is T4 and the second temper is selected from the group consisting of T6, T79, T78, T77, T76, T74, T73 and T8.

40. (New) The method according to claim 1, wherein the first temper is selected from the group consisting of T73, T74 and T76 and the second temper is selected from the group consisting of T6, T79, T78, T77 and T8.

41. (New) The method according to claim 1, wherein the first temper is selected from the group consisting of T73, T74 and T76 and the second temper is selected from the group consisting of T79, T78, T77 and T8.